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09/110,661	07/07/1998	LAWRENCE W. KREBS	2779-Z	4961

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JIM ZEGEER
SUITE 108
801 NORTH PITT STREET
ALEXANDRIA, VA 22314

EXAMINER	
PHUNKULH, BOB A	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Paper No. 18

Application Number: 09/110,661
Filing Date: July 07, 1998
Appellant(s): KREBS ET AL.

Jim Zegeer
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2/27/2003.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 1-2 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

5,640,505	Hearn et al.	6-1997

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hearn et al. (US 5640505), hereinafter Hearn, in view of the Admitted Prior Art, hereinafter APA.

Regarding claim 1, Hearn discloses a system which relates to an operational support structure for a telecommunications network. The system comprises a problem manager 143 (fault *manager)* for receiving fault reports from the other domains, using information contained in the database 130 concerning the network topology, it correlates these faults and identifies the problems which are causing them. It may receives reports of faults from a set of switches and also a set of multiplexers. By retrieving data on the network topology from the database 130, it can correlate these faults might identify the problem which is causing the faults as being caused **by failure of a particular multiplexer.** The Identified problems are recorded in the database 136, and the manager 143 sends instructions (recommendation) to the traffic manager 138 *(an interference engine),* the service domain 14 or the traffic domain 18 to restore lost services and to remove problems (see figs. 2, 5; and col. 11 lines 21-34). Hearn et al., further disclose, this could be implemented in an ATM network (see col. 7 lines 36-52).

The traffic manager 138 also identifies traffic problems such as congestion on the network topology from database 130, data on traffic usage from database 132 and network problems from database 136, the traffic manager 138 finds solutions to traffic problems and then sends appropriate instructions to the other domain so as to reduce or overcome the problem (see col. 11 lines 37-47). The database 134 contains rules which are used in planning the network (see col. 11 lines 12-20).

Regarding claim 2, Hearn discloses providing sophisticated diagnostics of fault

and performance management for multivendor ATM networks (see col. 5 line 33 to col. 6 line 8).

Hearn fails to explicitly disclose that the ATM management network includes security management. In page 2 line 4-7 of the specification, the APA discloses that a "classical" definition of network management includes security management.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include security management in the system taught by Hearn for providing secure transmission of customers account information in the network.

(11) Response to Argument

In page 7 the Applicant agued the following:

> Neither the problem manager nor the traffic manager nor the performance manger of Hearn is chararacterized as being an expert system or an inference engine. Hence, it is not clear that the reference utilizes an inference engine fault manager including correlation of ATM switch failures and traps and automating recommended courses of corrective action or that there is an inference engine used for the performance management of the ATM management network. In fact, the terms "inference" and "expert" do not appear in the Hearn et al disclosure.

In response to the Applicant's argument, Hearn discloses the problem manager 143 (fault manager) receives fault reports from the other domains. By using information contained in the database 130 concerning the network topology, it correlates these faults and identifies the problems which are causing them. For example, it may receive

reports of faults from a set of switches and also a set of multiplexers. By retrieving data on network topology from the database 130, ***it can correlate these faults end might identify the problem which is causing the faults as being caused by failure of a particular multiplexer***. Identified problems are recorded in the database 136. The problem manager 143 sends instructions to the traffic manager 138, the service domain 14 or the technology domain 18 to restore lost service and to remove problems (col. 11 lines 21-34).

With regards to "expert" system, Hearn discloses the traffic manager 138 (inference engine) also identifies traffic problems such as congestion on traffic routes and switch overloads. By retrieving data on the network topology from database 130, data on traffic usage from database 132 and network problems from database 136, the traffic manager 138 finds solutions to traffic problems and then sends appropriate instructions to the other domains so as to reduce or overcome the problem (see col. 11 lines 37-47). The data base 134 contains rules which are used in planning the network (see col. 11 lines 12-20). The functions described above are consistent with the definition of "expert system" described in Newton's Telecom Dictionary (see below).

> **Expert System** A very sophisticated computer program consisting of three parts. 1. A stock of rules or general statements, e.g. Some long distance phone calls are free. These rules are generally based on the collective wisdom of human "experts" who are interviewed. 2. A set of particular facts, e.g. Three companies provide the bulk of long distance service in the United States. 3. Most importantly, a "logical engine" which can apply facts to rules to reach all the conclusions that can be drawn from them - one of which might be "Three companies give away long distance phone calls." (Which would be wrong.) The idea of expert systems is to help people solve problems. For example, Compaq is trying to improve its customer service by installing automated assistants that work on the principle that reasoning is often just a matter of remembering the best precedent. The simplest expert systems, according to the Economist Magazine, assume that their rules and facts tell them everything there is to know. Any statement that cannot be deduced from the system's rules and facts is assumed to be false. This can lead machines to

answer "YES" or "N0," when they should say "I don't know." Slowly we are beginning to find ways of dealing with the inflexibility of machines. One such gadget is a "truth maintenance machine" invented by Dr. Jon Doyle of MIT. As each fact is fed into the system, Dr. Doyle's program checks to see if it (or the deductions derived from it) contradict any of the facts or deductions already in the system. If there is a contradiction, the machine works backward along its chain of reasoning to find the source and dispose of that troublesome fact or deduction. So the system maintains one consistent set of beliefs.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Bob A. Phunkulh
May 19, 2003

Ajit Patel
(Conferee)

DOUGLAS OLMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

JIM ZEGEER
SUITE 108
801 NORTH PITT STREET
ALEXANDRIA, VA 22314